

MUNICIPAL DISTRICT OF BIG LAKES

TITLE:	Equipment Sanitation
APPROVED BY COUNCIL:	July 13, 2011
EFFECTIVE DATE:	July 13, 2011
POLICY NO.	ASB-12
LEGAL AUTHORITY:	Agricultural Pests Act

POLICY STATEMENT

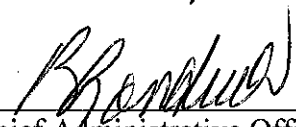
The Council of the Municipal District of Big Lakes recognizes that a number of crop diseases are declared pests under the Agricultural Pests Act of Alberta and are a concern to agricultural operations within the municipality. Council further recognizes that it is beneficial to the municipality to establish measures to prevent and/or control the spread of crop diseases by sanitation of ground disturbance equipment.

POLICY

1. All vehicles and equipment originating from outside the Peace Region and which may cause soil disturbance, shall be sanitized prior to entry onto agricultural lands, using the following criteria:
 - a. First; soil and vegetative material shall be removed from equipment by:
 - i. sweeping or scraping to remove all loose soil and plant debris;
 - ii. pressure washing, preferably with hot water or steam;
 - iii. high pressure crevice sanitation, with particular attention paid to those parts of equipment which come into direct contact with soil;
 - b. After soil and plant material removal; equipment shall be sprayed/misted throughout, with disinfectant (1-2% active ingredient bleach solution);
2. Vehicle and equipment traffic onto and off of agricultural lands shall be minimized whenever reasonably practicable, particularly during wet conditions;
3. Vehicles and equipment shall be staged in a vegetated area whenever reasonably practicable, with concern for sound soil conservation practices and soil erosion;
4. If "field sanitation" of vehicles/equipment is the only viable option, sanitation stations shall be located in vegetated (grassed) areas, whenever reasonably practicable, to prevent direct contact between sanitation residue and arable soil.



Reeve



Chief Administrative Officer

BEST MANAGEMENT PRACTICES

Clubroot Disease Management

July 2008

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1 Introduction

This document was prepared by the Working Group on Clubroot Disease of Canola with the following objectives:

- 1) Promote the development of effective and achievable management practices to minimize the spread of Clubroot spores from field to field in canola producing areas
- 2) To assist in educating Alberta's agriculture industry, the general public, oil & gas, and other relevant industries about Clubroot disease.

This best management practice is intended to provide diligent, regulatory compliant and effective management strategies for oil, gas and other related industries.

1.1 Background

Clubroot is a serious soil-borne disease of cruciferous crops (the cabbage family which includes mustards like canola) worldwide and was first identified in Europe in the thirteenth century. This disease is a major problem in cruciferous vegetable crops in some areas of British Columbia, Quebec and Ontario. Prior to 2003, there were two previous reports of Clubroot in cole crops in Alberta. Thus, Clubroot is not a new disease in Canada or Alberta.

In 2003, Clubroot was confirmed in several canola fields near Edmonton. These were the first reports of clubroot in canola in western Canada. As of 2007, Clubroot in canola has been confirmed in 11 municipalities in Alberta. The most heavily impacted areas are found in Edmonton and the surrounding Counties of Sturgeon, Parkland, Leduc, and Strathcona. Testing occurred in municipalities in relative close proximity to Edmonton, with the exception of one municipality in southern Alberta.

Clubroot was added as a declared pest to *Alberta's Agricultural Pests Act (APA)* in April 2007. The APA is the legislative authority for enforcement of control measures for declared pests in Alberta. The Minister of Alberta Agriculture and Rural Development is responsible for this Act.

Enforcement of pest control measures is the responsibility of the municipal authority, and Agricultural Fieldmen are responsible for enforcing pest control measures in their municipalities. Pest inspectors have the power to enter land at reasonable hour, without permission, to inspect for clubroot and collect samples.

The owner or occupant of the land has the responsibility to take measures to prevent the establishment and spread of Clubroot.

2 Management Objectives

CAPP fully supports the management objectives laid out by the Alberta Clubroot Management Committee (Feb 2008). They have advised oil and gas operators to:

Take measures such as equipment cleaning to prevent the establishment and to minimize the spread of Clubroot spores on the land and property. This is achieved by minimizing or restricting the movement of soil material containing resting clubroot spores from an infected field.

Assist in educating Alberta's oil and gas and other related industries about Clubroot disease on the land and property. **CAPP** member companies are actively accomplishing this objective through notices to our members and industry partners, presentations and development of working groups.

All **CAPP** members and industry partners are strongly encouraged to develop their own strategies to meet these management objectives.

3 Best Management Practice (BMP) - Equipment Cleaning Protocol

This BMP is designed to assist operators in meeting the primary management objective of minimizing or restricting the movement of soil material containing Clubroot spores from an infected field. At this point in time the most viable method of achieving this management objective is by cleaning equipment.

3.1 Equipment Cleaning Determination

Operators are encouraged to develop internal written processes that determine whether equipment cleaning to prevent Clubroot spread is required in any given situation. For example, areas where land-use is not agricultural or where canola has not, is not, and will not be grown do not pose a risk of spreading or containing Clubroot. In these areas cleaning equipment for the purpose of preventing the spread of Clubroot disease of canola is not required. Equipment that only comes in contact with gravel or pavement and accesses graveled pad or plant sites do not likely pose a significant risk so again cleaning is not required. It is up to each operator to determine which areas and situations require cleaning and which situations and areas do not.

To meet the Alberta Clubroot Committee management objective, if there is a reasonable risk of transporting soil material that could contain Clubroot spores from a given site equipment must be cleaned prior to exiting the location.

3.2 Equipment Cleaning Description

Once the requirement to clean equipment has been confirmed operators will be required to determine what level of equipment cleaning is appropriate for a specific situation.

- 1) **Mechanical Cleaning-** Mechanical cleaning is the removal of soil material using tools such as brooms, brushes, air compressors, shovels or by hand.
- 2) **Washing-** Washing is considered cleaning with water, steam or equivalent. Surfactants (soap or detergent) may or may not be used when washing with water, steam or equivalent.
- 3) **Disinfecting-** Disinfecting requires the use of a substance that inhibits or destroys the reproductive ability (spores) of Clubroot disease. Disinfecting is done after mechanical cleaning or washing has been completed. Alberta Agriculture and Rural Development recommends a 1-2% bleach-water mixture however other disinfectants could be used. The solution is to be misted on mechanically cleaned/ washed equipment maintaining a moist/wet interface with equipment for 15 minutes.

The type and level of cleaning required will depend on several factors including but not limited to:

- o Whether the site has a confirmed case of clubroot disease
- o Where the site is located geographically
- o The land-use of the site
- o Landowner requests and commitments
- o Washing infrastructure availability
- o Agriculture Fieldman / Municipality specific requirements

Cleaning activities where practical and possible should occur prior to leaving a location. Water used to wash vehicles must be contained and managed to adhere to provincial and municipal regulations, and landowner requirements.

3.3 Documentation

Operators are encouraged to develop a documentation process that will demonstrate they are meeting the primary management objective of preventing the establishment and minimizing the spread of Clubroot Disease.

The type and level of documentation needs to be determined by individual operators depending on the level of due diligence with which companies are comfortable. Due diligence can be considered the level of judgment, care, prudence, and activity that an operator would reasonably be expected to do under particular circumstances.

In general documentation components should include:

- o Documented process to determine if the cleaning protocol applies
- o Documented process for equipment cleaning
- o Documented process for tracking equipment cleaning, including a system for storing documented equipment cleaning activities

4 References